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FEDERAL COMMUNICATIONS COMMISSION  
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WT Docket No. 96-18

PP Docket No. 93-253

In the Matter of

Revision of Part 22 and  
Part 90 of the Commission's  
Rules to Facilitate Future  
Development of Paging  
Systems

Implementation of  
Section 309(j) of the  
Communications Act--  
Competitive Bidding

To: The Commission

PETITION FOR RECONSIDERATION AND CLARIFICATION

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## Summary

ProNet respectfully requests that the Commission modify and/or clarify its 2<sup>nd</sup> R&O and rules promulgated thereunder in the following respects:

1. To clearly define system boundaries for non-geographic incumbent licensees, the Commission should:

- define non-geographic incumbent systems based on Section 22.537 composite interference contours for all authorized transmitters, including all construction permits (even where the CP site cannot be constructed for reasons beyond the incumbent's control) for which applications were pending on or before July 31, 1996, irrespective of grant date; and revise Section 22.503(i);
- confirm that all composite interference contours are grandfathered, thereby allowing incumbents to undertake all transmitter relocations, modifications or other changes that maintain the composite interference contour outer perimeter, while preventing uncovered areas wholly contained within these composite contours from reverting to the geographic licensee; and
- resolve all pending licensing matters-- grant or dismissal of all pending applications and resolution of all outstanding litigation, including reconsideration/review of finder's preference grants-- before conducting auctions;

2. The Commission must adopt more flexible rules for "fill-in" transmitters, by revising Section 22.165(d) as set forth herein and otherwise clarifying the 2<sup>nd</sup> R&O, to:

- enable 929/931 MHz incumbents to utilize a formula assuming a median field strength of 21 dB $\mu$ V/m or some other real-world engineering showing to demonstrate that internal system modifications do not expand its outer perimeter interference contour (alternatively, the Commission should adopt a more liberal waiver policy based upon similar showings);
- affirm that "fill-in" transmitters installed under the interim licensing rules using the 21 dB $\mu$ V/m formula are beyond challenge; and

- broaden the definition of “fill-in” to include areas not wholly encompassed by existing composite interference contours, but sufficiently surrounded by such contours so as to preclude the geographic licensee from providing service in the area to be covered.

3. The Commission should resolve various technical issues raised in the 2<sup>nd</sup> R&O, by:

- clarifying that Section 22.723 confers no right on rural radiotelephone licensees to continue operations that cause actual interference to the co-channel primary licensee for a period of six month after receiving notice of interference from that licensee;
- revising Section 22.503(k)(3) to incorporate specific objective criteria in this otherwise wholly subjective coverage standard, *e.g.*, construction and operation of transmitters whose service contours cover fifty percent (at three years) and seventy-five percent (at five years) of the geographic area not covered by incumbent co-channel licensees in the subject MTA or EA;
- establishing specific technical standards to govern adjacent geographic licensee co-channel interference in the absence of licensee agreement;
- modifying Section 90.493 to confirm that non-exclusive licensees previously grandfathered on the exclusive 929 MHz channels on a shared basis only are not entitled to the interference protection afforded by Section 22.503(i); and
- requiring compliance with an objective, minimum construction/coverage/service standard as a precondition to any assignment, transfer or partition of a geographic license by a non-incumbent geographic licensee.

4. Finally, the Commission must reconsider its decision to impose rigid anti-collusion rules that constrain the ongoing business of the paging industry, by creating a “safe harbor” for the following:

- negotiation of intercarrier and similar arrangements between carriers;
- acquisitions, mergers and related negotiations; and
- parties who have withdrawn from competitive bidding.

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To: The Commission

**PETITION FOR RECONSIDERATION AND CLARIFICATION**

ProNet Inc. ("ProNet"), through its attorneys and pursuant to Section 1.106 of the Commission's Rules, 47 C.F.R. § 1.106, hereby petitions the Commission to reconsider its Second Report and Order (the "2<sup>nd</sup> R&O")<sup>1/</sup> in the above-captioned proceeding. In support of this petition, ProNet respectfully shows the following:

**I. INTRODUCTION AND STATEMENT OF INTEREST**

ProNet is a publicly-traded company with extensive experience in developing and operating wide-area paging networks. As a result of its recent program of aggressive acquisition and system expansion involving both common carrier paging ("CCP") and private carrier paging ("PCP")

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<sup>1/</sup>The *2<sup>nd</sup> R&O* was released February 26, 1997, and was published in the Federal Register on March 12, 1997.

systems, ProNet is one of the largest paging carriers in the nation, operating in all commercial mobile radio service ("CMRS") bands and serving over 1.2 million subscribers throughout the country.<sup>2/</sup> Because of ProNet's acquisition and infrastructure investment programs, the paging industry has experienced increased price and quality competition, more consumer choice and an accelerated rate of technological innovation.

ProNet has participated in the instant proceeding since its inception. Beginning with its Comments on the Notice of Proposed Rule Making initiating this proceeding ("NPRM"),<sup>3/</sup> ProNet raised concerns regarding the potential effects of geographic licensing on the ability of incumbent operators to continue to provide high quality service to the public. In its 2<sup>nd</sup> R&O, the Commission adopted final rules governing geographic licensing and competitive bidding procedures, and established procedures for grandfathering incumbent non-geographic licensees. ProNet supports the Commission's conversion of paging spectrum to geographic licensing, and appreciates the Commission's efforts to strike a balance between geographic licensees and incumbent systems. The Commission, however, failed to resolve many concerns raised in ProNet's earlier filings. The rules adopted in the 2<sup>nd</sup> R&O also raise numerous technical issues that must be resolved to permit a smooth transition to geographic licensing. Therefore, ProNet respectfully requests that the Commission modify and/or clarify its 2<sup>nd</sup> R&O and rules promulgated thereunder as detailed herein.

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<sup>2/</sup>ProNet also provides wide-area paging services to the medical profession, operating on Special Emergency Radio Service and certain Part 90 business radio channels in over a dozen major metropolitan areas.

<sup>3/</sup>11 FCC Rcd 3108 (1996).

## II. THE COMMISSION MUST CLEARLY DEFINE THE PARAMETERS OF NON-GEOGRAPHIC INCUMBENT SYSTEMS AND INCLUDE ALL VALID CONSTRUCTION PERMITS IN ITS DEFINITION

The Commission's decision to protect non-geographic incumbents based on the outer perimeter of its interference contours is a practical means to simplify licensing in shifting to a geographic licensing regime. However, certain inconsistencies in the 2<sup>nd</sup> R&O and the rules adopted therein, particularly new Section 22.503(i),<sup>4/</sup> appear to undermine the protections extended to non-geographic incumbents. In addition, the 2<sup>nd</sup> R&O is unclear regarding the status of non-contiguous incumbent transmitters. To rectify these problems, the Commission should clarify the 2<sup>nd</sup> R&O and modify Section 503(i) to:

- define non-geographic incumbent systems according to the composite interference contours of all authorized transmitters, including valid construction permits, for which applications were pending on or before July 31, 1996, irrespective of grant date; and
- confirm that composite interference contours are grandfathered, thereby allowing any transmitter relocations, modifications or other changes that do not increase the outer perimeter of the composite interference contour, and preventing uncovered areas wholly contained within these composite contours from reverting to the geographic licensee.

Each element of the foregoing proposals are explained in detail as follows.

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<sup>4/</sup>New Section 22.503(i) provides, in pertinent part:

All facilities constructed and operated pursuant to a paging geographic area authorization must provide co-channel interference protection . . . to all co-channel facilities of other licensees within the paging geographic area that were authorized on [insert effective date of this rule] and have remained authorized continuously since that date.

*See 2<sup>nd</sup> R&O at Appendix A, page 18.*



**A. Construction Permits Must Be Counted In Determining Incumbents' Composite Interference Contours**

New Section 22.503(i) of the Rules extends interference protection to all "authorized" incumbent transmitters.<sup>5/</sup> In traditional Commission vernacular, the term "authorized" encompasses valid construction permits as well as licensed, constructed transmitters. ProNet requests, however, that the Commission confirm that incumbents' valid construction permits are included in determining composite interference contours even where the CP site is no longer available for use due to the delay between filing and grant of the underlying application or other factors beyond the incumbent's control.

Coupled with modification of the "fill-in" rules (*see* Section III-A., *infra*), this clarification will expedite provision of service to the public by enabling incumbents to commence operations without delay or additional regulatory burdens (*e.g.* applications to relocate authorized facilities pursuant to Section 22.142(d), requests for Special Temporary Authority ("STA") or extension of time to construct). Because loss of CP sites is caused by delay in granting applications, on the one hand, and the explosion in wireless services, on the other, fundamental fairness dictates the clarification requested here. This clarification will also provide greater certainty regarding unserved territory available to geographic licensees, who will be relieved of the burden of investigating the construction status of authorized facilities prior to bidding.

**B. Authorizations Granted Pursuant To Applications Pending As Of July 31, 1996 Must Be Given Incumbency Status**

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<sup>5/</sup>See text at note 4, *supra*.

Section 22.503(i) also limits interference protection to incumbent co-channel transmitters "that were authorized on [insert effective date of this rule] . . . ." Barring reconsideration or stay, the rules adopted in the 2<sup>nd</sup> R&O will become effective on May 11, 1997 (i.e., 60 days after publication in the Federal Register). Section 22.503(i) will thus deny incumbent status to any construction permits not granted before May 11, 1997, and any construction permits or licenses reinstated after that date, a result directly at odds with the text of the 2<sup>nd</sup> R&O. The Commission must revise Section 22.503(i) to eliminate this arbitrary, unduly restrictive limitation; and should not commence auctions of paging spectrum until all pending applications and litigation have been resolved.

**1. Authorizations Must Be Entitled To Incumbency Status Regardless Of Grant Date**

In ¶6 of the 2<sup>nd</sup> R&O, the Commission states that "[n]on-mutually exclusive paging applications filed on or before July 31, 1996 will be processed."<sup>6/</sup> New Section 22.503(i), however, denies interference protection and, by extension, inclusion in the determination of incumbent composite interference contours, to any transmitters authorized after May 11, 1997. At present, thousands of 931 MHz applications, many of which are non-mutually exclusive and therefore ripe for grant, remain pending before the Commission. Similarly, hundreds of applications, construction permits and licenses are subject to litigation before the Commission. ProNet understands that the Commission is attempting to process all non-mutually exclusive paging applications and resolve all outstanding litigation pertaining to paging applications prior to the May 11, 1997 effective date of

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<sup>6/</sup>Likewise, in its First Report and Order in this proceeding, 11 FCC Rcd 16570 ("*1<sup>st</sup> R&O*"), the Commission stated that non-mutually exclusive applications filed on or before February 8, 1996, and non-mutually exclusive applications filed under the Interim Licensing Rules would be processed.

the 2<sup>nd</sup> R&O; however, it is doubtful that the Commission staff possesses adequate resources to complete this formidable task. Unless Section 22.503(i) is revised to reflect the Commission's expressed intent in the 2<sup>nd</sup> R&O, construction permits granted after May 11, 1997, and authorizations reinstated pursuant to resolved litigation after that date will be rendered worthless, whereas authorizations fortuitously issued or reinstated prior to May 11, 1997 will receive full incumbency status irrespective of filing date. Such disparate treatment of similar applications would be arbitrary, capricious and clearly contrary to the Commission's stated intent in this proceeding.

The Commission should, therefore, revise Section 503(i) to read as follows:

All facilities constructed and operated pursuant to a paging geographic area authorization must provide co-channel interference protection . . . to all co-channel facilities of other licensees within the paging geographic area that were authorized upon grant of an application filed with the Commission on or before July 31, 1996 and remain validly authorized.

## **2. The Commission Should Resolve All Pending Licensing Matters Before Conducting Auctions**

Until geographic licenses are assigned, ProNet and other incumbents are unable to expand their existing systems on the exclusive paging channels; therefore, ProNet is keenly interested in proceeding with the application/auction process as soon as possible. Nevertheless, ProNet believes that the Commission must defer geographic license auctions until all pending applications have been granted or dismissed, and all pending litigation pertaining to paging authorizations is resolved by the Commission. Allowing the Commission staff to resolve these outstanding matters prior to auctions is essential for auction participants to obtain complete, accurate information with respect

to incumbent systems and available "white space" on the various channels.<sup>7/</sup> Uncertainty regarding this information will also make it difficult for incumbent and prospective applicants to attract investors and raise capital for auctions and ensuing infrastructure construction.

Moreover, resolution of pending applications and litigation prior to auctions will permit closure with respect to the rules superseded by the 2<sup>nd</sup> R&O.<sup>8/</sup> The Commission has long acknowledged that litigation regarding application processing rules should be governed, to the extent possible, by rules existing at the time the applications were filed.<sup>9/</sup> In particular, ProNet notes that the Commission has eliminated the Finder's Preference and has dismissed all pending Finder's

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<sup>7/</sup> The value of geographic licenses to a particular applicant depends in large measure on that applicant's existing authorizations; until applications to expand existing networks or establish service in new territories are acted upon by the Commission, it is impossible to determine the value of a geographic license covering the relevant territory.

<sup>8/</sup> Closure will avoid a repeat of the aftermath of the *Part 22 Rewrite Order, Revision of Part 22 of the Commission's Rules Governing the Public Mobile Services*, 9 FCC Rcd 6513, 6533 (1994), in which new rules were stayed pending resolution of outstanding litigation, *see Order* in CC Docket No. 92-115, 10 FCC Rcd 4146, 4147-4148 (1995), but the stay was never lifted, and some of the outstanding litigation is still unresolved over two years later.

<sup>9/</sup> In the *Part 22 Rewrite Order*, the Commission ordered the Common Carrier Bureau:

to act on all pending petitions for reconsideration of 931 MHz paging applications prior to the effective date of the new rules. . . . If the Commission or the Bureau have not acted upon the pleadings described above by the date that the rules adopted herein are effective, we shall stay the effect of new Section 22.541 . . . . To the extent these cases can be resolved under existing rules, they should be.

9 FCC Rcd at 6534. While the Commission may apply newly promulgated rules retroactively to pending applications and granted authorizations subject to reconsideration, *Id.* at 6534-35, it must clearly state in the record why such retroactive effect is necessary. *Yakima Valley Cablevision, Inc.*, 794 F.2d 737 (D.C. Cir. 1986).

Preference applications.<sup>10/</sup> Notwithstanding this action, the Commission remains obligated to resolve any and all Finder's Preference grants already issued and subject to reconsideration or review.

**C. Deconstructed Transmitters That Can Be Replaced By Fill-in Transmitters Should Not Revert To The Geographic Licensee**

The 2<sup>nd</sup> R&O provides (at ¶18) that spectrum recovered from an incumbent by the Commission shall revert automatically to the geographic licensee. ProNet supports this policy, with one caveat: where incumbent operations are discontinued by an incumbent in geographic areas wholly encompassed by the incumbent's valid composite interference contours, reversion to the geographic licensee should not occur. Reversion in these cases would create an untenable situation in which the geographic licensee obtains territory, thereby barring the incumbent from resuming service in the future, but is itself prohibited from ever operating a transmitter in the subject territory. Reversion in these cases would also contradict the Commission's policy allowing fill-in transmitters to be installed anywhere within the incumbent's outer perimeter interference contours. Clarification of the 2<sup>nd</sup> R&O to confirm that non-geographic incumbents' composite interference contours are grandfathered will eliminate the potential for such confusing or disruptive situations.

**D. Incumbent Licensees Should Retain Non-Contiguous Transmitters Even If Converting To A Single System License**

The Commission's decision to allow non-geographic incumbents to trade in site-specific licenses for a single system-wide license "demarcated by the aggregate of the interference contours around each of the incumbents' contiguous sites"<sup>11/</sup> will greatly simplify licensing. The

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<sup>10/</sup> 2<sup>nd</sup> R&O, at ¶18.

<sup>11/</sup> 2<sup>nd</sup> R&O, at ¶58 (emphasis added).

Commission's reference to "contiguous sites," however, could be construed to terminate incumbents' authorizations for non-contiguous co-channel transmitters upon issuance of a system license. Wide-area paging systems need not consist entirely of contiguous transmitters; remote transmitters may be linked to the system via control/repeater facilities or satellites, or a system may operate pursuant to intercarrier or other agreements between co-channel licensees. The Commission should therefore clarify the 2<sup>nd</sup> R&O to indicate: (1) that a single system license may include non-contiguous transmitter sites; or (2) the steps incumbent licensees must take to maintain separate licenses for stand-alone or remote transmitters.

### **III. THE COMMISSION MUST ADOPT MORE FLEXIBLE RULES FOR "FILL-IN" TRANSMITTERS BY INCUMBENT NON-GEOGRAPHIC LICENSEES**

The 2<sup>nd</sup> R&O codifies the interim rule allowing incumbents to add or modify transmitters ("fill-in" transmitters) without prior Commission consent or notification provided the outer perimeter composite interference contour of an incumbent's network is not expanded.<sup>12/</sup> The Commission also adopts the service and interference contours specified in Sections 22.537(e) (Table E-1) and 22.537(f) (Table E-2) for all exclusive 929-930 and 931-932 MHz paging transmitters.<sup>13/</sup> ProNet supports the Commission's decision to fix the outer perimeter of incumbent 929 and 931 MHz networks based on interference contours as defined in Table E-2. Rigid application of Table E-2 to existing and prospective fill-in transmitters, however, will prevent incumbents from making

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<sup>12/</sup>See 2<sup>nd</sup> R&O at ¶57 and revised Section 22.165(d)(1). The Commission previously required that neither the composite service contour nor composite interference contour be extended for the new or modified facility to qualify as a "fill-in."

<sup>13/</sup>2<sup>nd</sup> R&O at ¶69.

modifications necessary to maintain current networks.<sup>14/</sup> Because these unintended consequences are clearly contrary to the public interest, ProNet seeks reconsideration of this aspect of the 2<sup>nd</sup> R&O.

Specifically, as detailed below, ProNet requests that the Commission:

- allow incumbents to employ an alternative formula or other real-world engineering showing to demonstrate that internal system modifications do not expand its outer perimeter interference contour; and
- broaden the definition of “fill-in” to include areas not wholly encompassed by existing composite interference contours, but sufficiently surrounded by such contours so as to preclude the geographic licensee from providing service in the area to be covered.

These changes can be implemented by revising Section 22.165(d) as follows:

\* \* \*

(1) Except as provided elsewhere in this Section 22.165(d), the interfering contours of the additional transmitter(s) must be totally encompassed by the composite interfering contour of the existing station (or stations under common control of the applicant) on the same channel, or, alternatively, sufficiently encompassed such that any extensions beyond the composite interfering contour of the existing station are into areas that no other licensee can serve without interfering with the existing station; except that this limitation does not apply to nationwide network paging stations or in-building radiation systems; and further provided, that for stations in the 931-932 MHz band, the composite interfering contour of the existing station shall be determined in accordance with Section 22.537(f) of this Part, but the interfering contour of the additional transmitter(s) may be determined using one of the following methods:

(i) the distance from the transmitting antenna to the interfering contour along each cardinal radial is calculated as follows:

$$d_{km} = 3.033 \times h_m^{0.38} \times p_w^{0.16}$$

where d is the radial distance, h is the radial antenna HAAT, and p is

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<sup>14/</sup>In adopting Tables E-1 and E-2 from Section 22.537, the Commission does not differentiate between licensed transmitters which form a system's composite interference contour and fill-in transmitters. ProNet assumes that the Commission intended that Table E-2 govern interference contours of fill-in and fence-post transmitters in the 929/931 MHz bands.

the radial ERP in watts;<sup>15/</sup> or

(ii) any alternative formula or real-world engineering demonstration acceptable to the Commission.

**A. Incumbent Fill-in Transmitters Should Be Evaluated Under A More Flexible Standard Than Table E-2**

The record in this proceeding demonstrates the critical importance of allowing incumbent paging operators to modify and add transmitting facilities in response to public demand. In its 1<sup>st</sup> R&O, the Commission partially lifted its freeze on new applications by incumbents, explaining that “paging operators need flexibility not only to make modifications within their existing service areas, but to add sites that extend the coverage of their systems into areas of new growth, such as outlying suburbs and new business centers.”<sup>16/</sup> Similarly, in the 2<sup>nd</sup> R&O the Commission described its objective as providing flexibility to incumbents within their existing service areas, provided this flexibility does not prejudice geographic licensees.<sup>17/</sup>

Applying the interference contours in Table E-2 to 929/931 MHz fill-in transmitters affords insufficient flexibility to incumbent operators. Rather, it unduly restricts their options and places them at the mercy of geographic licensees, even in situations where the geographic licensee is precluded from serving the territory targeted by the incumbent’s proposed modifications. Without more flexible fill-in rules for 929/931 MHz, (1) fill-ins constructed by incumbents during the pendency of this proceeding will be jeopardized; revocation of these fill-ins may result in a violation of Section 316 of the Act; (2) incumbents will be unable to make necessary adjustments when

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<sup>15/</sup>As discussed below, this formula assumes a median field strength of 21 dBμV/m.

<sup>16/</sup>*1<sup>st</sup> R&O*, 11 FCC Rcd at 16581-16582 (1996).

<sup>17/</sup>*2<sup>nd</sup> R&O* at ¶57.



existing or authorized transmitter sites are lost or become useless due to circumstances beyond their control; and (3) incumbents will be unable to expand coverage within their existing composite interference contours.

First, use of Table E-2 to determine interference contours for 929/931 MHz fill-in transmitters will cause a pivotal change in comparable regulation that existed prior to issuance of the 2<sup>nd</sup> R&O. Specifically, under the temporary rules governing licensing of paging facilities during the pendency of this proceeding (the "Interim Licensing Rules"), the Commission adopted a more flexible standard for deriving the interference contours of proposed 929/931 MHz fill-in transmitters, thereby providing incumbents increased flexibility to respond to subscriber demand within their existing systems. In the NPRM, the Commission proposed replacing Table E-2 with a formula employing a median field strength of 21 dB $\mu$ V/m,<sup>18/</sup> and identified this 21 dB $\mu$ V/m formula as determining interference contours under the Interim Licensing Rules.<sup>19/</sup> The Commission then clarified in a Public Notice released April 5, 1996 (the "April 5 Public Notice") that, under the Interim Licensing Rules, "the Commission will continue to apply current rules to define the interference contour of existing paging systems. *See* 47 C.F.R. §22.537."<sup>20/</sup>

Following issuance of the April 5 Public Notice, the Commission staff further clarified the Interim Licensing Rules to confirm that, while Table E-2 established the composite interference

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<sup>18/</sup>11 FCC Rcd 3108, 3119-20 (1996).

<sup>19/</sup>*Id.*, at 3136, note 271.

<sup>20/</sup>*Wireless Telecommunications Bureau Clarifies Definition of Interference Contour for Interim Paging Rules*, DA 96-538, released April 5, 1996. The Commission restated this clarification in its *1<sup>st</sup> R&O*, 11 FCC Rcd at 16587. In both clarifications, the Commission indicated that Section 22.537(f) applied to 929 MHz as well as 931 MHz.

contour, *i.e.*, the outer perimeter, of existing 929/931 MHz systems, licensees were permitted to use the 21 dB $\mu$ V/m formula to derive the interference contour of proposed transmitters to determine whether these proposed transmitters qualified as fill-ins. Although the Commission did not issue a Public Notice regarding this further clarification, the Wireless Telecommunication Bureau staff confirmed this interpretation of the Interim Licensing Rules to representatives of several paging licensees.<sup>21/</sup> By allowing use of this formula as an alternative to the fixed radii contours dictated by Table E-2, the Commission staff plainly recognized the real-world constraints faced by incumbent licensees unable to expand existing operations but compelled to install additional transmitters in the periphery of existing networks to respond to public demand.

Taken literally, the text at ¶69 of the 2<sup>nd</sup> R&O will threaten system improvements already implemented by ProNet and other incumbent licensees under the Interim Licensing Rules. Strict adherence to Table E-2 may subject fill-in transmitters installed using the 21 dB $\mu$ V/m formula to attack by geographic licensees, notwithstanding an absence of interference resulting from operation of these facilities. Requiring ProNet and other incumbent licensees to discontinue operating these transmitters will cause immediate degradation of existing networks and disrupt service to subscribers. Moreover, many of the transmitters ProNet has installed as permissive fill-ins are essential to conversion of existing networks to new FLEX technology which, as the Commission has recognized in this proceeding,<sup>22/</sup> provides dramatic improvements in spectral efficiency over less

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<sup>21/</sup>Letters from three different firms dated April 10, 1996, April 18, 1996 and June 19, 1996, respectively, to various members of the Bureau staff confirming this clarification are attached hereto as Exhibit 1.

<sup>22/</sup>See *1<sup>st</sup> R&O*, 11 FCC Rcd at 16578.

robust POCSAG RF networks.

Second, rigid application of Table E-2 to fill-in transmitters will prevent 929/931 MHz incumbents from changing transmitter locations or configuration in response to unforeseen events, including loss of CP sites due to inordinate delays in granting 929/931 MHz applications and the literal explosion in demand for RF sites to provide wireless services. In the NPRM, the Commission acknowledged that certain situations might warrant allowing incumbents to modify their service areas without geographic licensee consent "to preserve system viability."<sup>23/</sup> Specifically, the Commission acknowledged that relocation of transmitters may be necessitated by loss of a transmitter site; or by new construction nullifying coverage from the transmitter.<sup>24/</sup> In ¶69 of the 2<sup>nd</sup> R&O, however, the Commission ignored its previous concern for these real-world necessities by requiring geographic licensee consent for all modifications expanding an incumbent's outer perimeter interference contours. The 2<sup>nd</sup> R&O also fails to address requests for relocation of authorized, but unconstructed transmitters pursuant to Section 22.142(d) of the Rules as repeatedly requested by ProNet.<sup>25/</sup> Relocation of existing or authorized (but not yet constructed) transmitters

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<sup>23/</sup>11 FCC Rcd at 3117.

<sup>24/</sup>*Id.* ProNet and other commenters supported the Commission's proposal to allow such flexibility where incumbents' existing or authorized transmitters are placed in jeopardy.

<sup>25/</sup>Section 22.142(d) permits licensees to file an application to relocate a transmitter prior to expiration of the construction period-- thereby automatically extending the construction deadline-- "because of involuntary loss of the proposed site or for other reasons due to causes beyond the licensee's control." ProNet explicitly requested that the Commission confirm the continued validity of Section 22.142(d) in its March 1, 1996 "Comments on Interim Licensing Proposal" (at 19-20); its March 11, 1996 "Reply Comments on Interim Licensing Proposal" (at 14-15); its March 18, 1996 "Comments on Geographic Licensing and Competitive Bidding" (at 13); its April 1, 1996 "Reply Comments on Geographic Licensing and Competitive Bidding" (at 19-20); its June 10, 1996 Petition  
(continued...)

due to unanticipated, changed circumstances is essential to carriers, particularly those engaged in system build-out.<sup>26/</sup>

Allowing non-geographic incumbents to utilize the 21 dBµV/m formula or some other real-world engineering showing to demonstrate that a relocated or modified 929/931 MHz transmitter qualifies as fill-in will allow incumbents to respond efficiently to actual or *de facto* loss of transmitter sites. It will also virtually eliminate the need for Section 22.142(d) relocation applications and requests for STA, as replacement sites could be engineered using directional antennas, reduced power or other techniques to prevent any extension beyond the authorized interference contour. Table E-2, by contrast, mandates a 50 mile radius minimum interference contour irrespective of real-world signal strength or actual interference potential.<sup>27/</sup> As a result, every relocation of an authorized (constructed or unconstructed) 929/931 MHz transmitter that is less than 50 miles-- in any direction-- from existing Table E-2 composite interference contour outer perimeters

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<sup>25/</sup>(...continued)

for Partial Reconsideration of the *1<sup>st</sup> R&O* (at 9); and its July 17, 1996 Petition for Reconsideration of the Commission's *Order on Reconsideration of 1<sup>st</sup> R&O* (at 9-10).

<sup>26/</sup>Loss of proposed transmitter sites is an especially critical issue for 931 MHz incumbents. Due to the *de facto* freeze on 931 MHz application processing pending development of the Commission's processing software, applications filed over two years ago remain pending or were only recently granted, and thousands of applications filed between September 30, 1995 and July 31, 1996 remain pending. Meanwhile, towers have been deconstructed and once-available space on towers or buildings has been filled by licensees in other services. Consequently, ProNet is aware of several sites requested in its pending or recently granted applications that are no longer available.

<sup>27/</sup>For illustration, under Table E-2, a 929 or 931 MHz transmitter operating at 50 watts effective radiated power ("ERP") at a height above average terrain ("HAAT") of 50 feet has the same 50 mile radius interference contour as a transmitter operating at 1000 feet HAAT and 1000 watts ERP. Because of the inflexibility in Table E-2, 929/931 MHz licensees cannot reduce interference contours below 50 mile radius by reducing power, as can their counterparts operating in the VHF and UHF bands.

will be precluded<sup>28/</sup> unless consent can be obtained from the geographic licensee. Yet, because geographic licensees cannot provide service to areas internal to an incumbent system, requiring geographic licensee consent in such instances will not serve the Commission's stated objective, *i.e.*, "protecting the geographic area licensees from co-channel interference from the incumbent licensees."<sup>29/</sup> It will only empower geographic licensees to block the introduction or improvement of service by incumbents to gain a competitive advantage, extort monetary payment, or use as leverage to coerce a buyout.

Third, other legitimate internal system modifications by non-geographic incumbents under the new licensing regime will be precluded by inflexible application of Table E-2 to 929/931 MHz fill-in transmitters. For example, population centers wholly contained within an incumbent's composite interference contours may nevertheless not yet be receiving service; changing subscriber needs may necessitate installation of additional transmitters to ensure building penetration in an area near the periphery of an existing system; and conversion to FLEX technology may necessitate installation of additional transmitters to serve essentially the same areas already being served. Although, as noted above, the Commission's Rules provide for low-power signal boosters, all transmitters operating in excess of 5 watts ERP are assigned an interference contour of at least 50 mile radius. Absent an alternative basis for determining interference contours for fill-in transmitters,

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<sup>28/</sup>Section 22.537(h) of the Commission's Rules does permit low-power "signal boosters" with interference contours of 6.2 miles. Signal boosters, however, are limited to 5 watts ERP and are therefore not a viable substitute for full-fledged transmitters.

<sup>29/</sup>2<sup>nd</sup> R&O at ¶57.

legitimate service requirements within an incumbent's existing footprint will remain unfulfilled.<sup>30/</sup>

Based on the foregoing considerations, ProNet requests that the Commission modify the 2<sup>nd</sup> R&Q as follows:

(1) The Commission should declare that all fill-in transmitters constructed during the interim licensing period using the 21 dB $\mu$ V/m formula comply with the Commission's Rules and are beyond challenge.

(2) Incumbent non-geographic licensees should be allowed to use the 21 dB $\mu$ V/m formula to determine if a proposed transmitter will leave the outer perimeter interference contour (as determined by Table E-2) unchanged. Alternatively, the Commission should afford incumbents the ability to utilize any real-world engineering showing to demonstrate that a proposed fill-in transmitter will leave the outer perimeter interference contour unchanged.<sup>31/</sup>

(3) If the Commission is unwilling to write the flexibility requested above into Section 22.537(f) of the Rules, it should adopt a new standard for waiver of Sections 22.537(f) and 22.165(d)(1). Under this new standard, waiver will be granted, and the incumbent permitted to install a transmitter without consent of the geographic licensee, where the incumbent demonstrates:

- i. the transmitter is necessary to serve a real customer within the incumbent's existing composite system contours;

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<sup>30/</sup>It is important to note that even where an incumbent may not currently be providing service to areas within its existing footprint, such internal coverage cannot be met by a geographic licensee without impermissible interference to the incumbent system.

<sup>31/</sup>See ProNet's proposed revisions to Section 22.165(d), *supra*. In either case, ProNet suggests that the incumbent should be required to file an FCC Form 489 certifying that the fill-in transmitter does not expand the composite interference contours of the existing system (but would entail such an expansion if evaluated pursuant to Table E-2).

- ii. the transmitter will not extend composite system contours using 21 dB $\mu$ V/M or some other reliable engineering showing; and
- iii. operation of the proposed transmitter is otherwise in the public interest.<sup>32/</sup>

**B. The Commission's Definition Of "Fill-In" Sites Should Include Sites Serving Territory That A Geographic Licensee Cannot Cover**

The Commission also declined to adopt ProNet's suggestion that incumbents be allowed to add or modify transmitters where existing interference contours do not wholly encompass the new transmitters but nevertheless preclude the geographic licensee from providing service in the area to be covered (*i.e.* without interfering with the incumbent's existing transmitting facilities).<sup>33/</sup> These situations-- which include creases or "doughnuts" formed by composite contours, and small gaps in system coverage along coastlines-- are common in new or developing wide-area paging networks.<sup>34/</sup> Because geographic licensees cannot serve these areas, the Commission's refusal to allow incumbents to do so will deprive the public in these areas from receiving service, which is contrary to the public interest. Further, requiring geographic licensee consent in these situations will provide geographic licensees with unnecessary, unwarranted leverage over incumbents, with no

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<sup>32/</sup>As discussed, ProNet believes that modification of the rules governing interference contours for fill-in transmitters will eliminate the need to address applications or special requests by incumbents to relocate transmitters where sites are lost. Should the Commission decline to adopt the foregoing proposals, it must enable non-geographic incumbents to file applications to replace lost transmitter sites without obtaining geographic licensee consent.

<sup>33/</sup>ProNet presented this proposal in its March 18, 1996 Comments (at 13) and its April 1, 1996 Reply Comments (at 19-20). No analysis of these proposals is set forth in the 2<sup>nd</sup> R&O.

<sup>34/</sup>Exhibit 2 hereto is a map depicting the 50 mile interference contours for certain authorized and pending 931.2125 MHz transmitters held by a ProNet subsidiary in southern and central Florida. The gaps in coverage identified on these maps are plainly too small to be served by a non-affiliated co-channel transmitter without causing harmful interference to ProNet's network.

corresponding public benefit.

The Commission should therefore modify the 2<sup>nd</sup> R&O to also permit additional transmitters to be installed on a permissive basis provided that any extension beyond the incumbent's outer perimeter interference contour is limited to areas that cannot be served by anyone other than the incumbent.<sup>35/</sup>

#### **IV. THE 2<sup>nd</sup> R&O RAISES TECHNICAL ISSUES THAT WARRANT IMMEDIATE CONSIDERATION**

The rules adopted in the 2<sup>nd</sup> R&O raise several technical concerns and issues that must be analyzed and resolved during the reconsideration phase of this proceeding. Failure to do so will preclude a smooth transition to geographic licensing and may prolong the uncertainty, confusion, delay and inequities that the new regime of paging licensing is intended to eliminate. The technical issues warranting reassessment and clarification are:

- interference rights and responsibilities of rural radio service and BETRS licensees;
- undue ambiguity of "substantial service" coverage standard;
- need for specific technical standards to govern interference between adjacent, co-channel geographic licensees;
- grant of protection to grandfathered, non-exclusive licensees operating on 929 MHz exclusive channels; and
- need to constrain alienability rights of non-incumbent geographic licensees.

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<sup>35/</sup>Incumbents should be required to file an FCC Form 489 for such sites, accompanied by a certification with respect to the extension area.



These issues are discussed below.

**A. Interference Issues Concerning Rural Radio Service  
And BETRS Licensees**

The 2<sup>nd</sup> R&O (at ¶35) and new Rule 22.723 provide that authorizations for new facilities in the Rural Radiotelephone Service ("RRS"), including BETRS facilities, may be granted but only on a secondary basis to any existing or future co-channel geographic area authorization or license. Although the authorization is plainly secondary, the new rule allows the RRS licensee to operate without restriction for a full *six months* after receiving notice from the primary licensee that the RRS licensee's secondary facility "*may* cause interference to existing or planned [primary] facilities . . ." (emphasis added). Thus, Rule 22.723 addresses the issue of expected interference to the primary licensee's operations but imposes no duty on the RRS licensee to resolve actual interference. On reconsideration, the Commission should clarify that Rule 22.723 confers no right on RRS licensees to continue, for six months after receiving notice from the co-channel primary licensee, operations that cause actual interference to that licensee.

Clarification is warranted on multiple grounds. The 2<sup>nd</sup> R&O provides no justification for allowing RRS licensees to continue interfering operations for a full six months after notice. Equally significant, neither a six month grace period for interfering secondary operations, nor a logical antecedent thereto, was discussed in the NPRM; as a result, the Commission gave no notice that it was contemplating adoption of such a preferential rule for RRS operators. Finally, a six month grace period for operations causing actual interference is inherently incompatible with the Commission's longstanding definition of secondary operation, *i.e.*, "[r]adiocommunications which